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--It is therefore an object of the present invention a pre-polymerized catalyst component for the polymerization of ethylene, optionally in mixtures with olefins  $CH_2$ =CHR, wherein R is a C1-C12 alkyl group, characterized by comprising a non-stereospecific solid catalyst component, comprising Ti, Mg and a halogen, which is pre-polymerized with an alpha olefin  $CH_2$ = $CHR^I$  wherein  $R^I$  is a C1-C8 alkyl group, to such an extent that the amount of the  $\alpha$ -olefin pre-polymer is up to 100g per g of said solid catalyst component.--

## In the Claims

Please amend claims 1-18 to read as follows:

- --1. (Amended) A pre-polymerized catalyst component for the polymerization of ethylene optionally in mixtures with olefins CH<sub>2</sub>=CHR, wherein R is a C1-C12 alkyl group, comprising a non-stereospecific solid catalyst component, comprising Ti, Mg and a halogen, which is pre-polymerized with an α-olefin CH<sub>2</sub>=CHR<sup>1</sup> wherein R<sup>1</sup> is a C1-C8 alkyl group, and the amount of the α-olefin pre-polymer is up to 100g per g of said solid catalyst component.
  - 2. (Amended) The pre-polymerized catalyst component according to claim 1 in which the amount of the  $\alpha$ -olefin polymer is less than 15 g per g of said solid catalyst component.



- 3. (Amended) The pre-polymerized catalyst component according to claim 2 in which the amount of the  $\alpha$ -olefin polymer is from 0.8 to 4 g per g of solid catalyst component.
- 4. (Amended) The prepolymerized catalyst component according to claim 1 comprising a titanium compound and a magnesium dihalide.
- (Amended) The pre-polymerized catalyst component according to claim 1 in which the magnesium dihalide is magnesium dichloride in active form and the titanium compound is selected from the compounds of formula Ti(OR)<sub>n-y</sub>X<sub>y</sub>, where R is a C1-C20 hydrocarbon group, X is a halogen, n is the valence of titanium and y is a number between 1 and n.
  - 6. (Amended) The pre-polymerized catalyst component according to claim 5 in which the titanium compound is chosen from TiCl<sub>4</sub>, TiCl<sub>3</sub> and Ti-tetralcoholates or Ti-chloroalcoholates of formula Ti(OR<sup>II</sup>)<sub>a</sub>Cl<sub>n-a</sub> where n is the valence of titanium, a is a number comprised between 1 and n, and R<sup>II</sup> is a C1-C8 alkyl or aryl group.
  - 7. (Amended) The pre-polymerized catalyst component according to claim 1 in which the solid catalyst component to be pre-polymerized has a surface area, by B.E.T. method, between 20 and 500 m<sup>2</sup>/g, and a total porosity, by B.E.T. method, higher than 0.2 cm<sup>3</sup>/g.
  - 8. (Amended) The pre-polymerized catalyst component according to claim 1 in which the solid catalyst component to be pre-polymerized has a porosity (Hg method) due to pores with radius up to 10000 Å, of from 0.3 to 1.5 cm<sup>3</sup>/g.

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- 9. (Amended) The pre-polymerized catalyst component according to claim 1 in which the solid catalyst component is pre-polymerized with an α-olefin selected from propylene, butene-1, hexene, 4-methyl-1-pentene, and octene-1.
- 10. (Amended) The pre-polymerized catalyst component according claim 9 in which the  $\alpha$ -olefin is propylene.
- 11. (Amended) The pre-polymerized catalyst component according to claim 1 in which the solid catalyst component to be pre-polymerized is obtained by:
  - reacting a compound MgCl<sub>2</sub>.mROH, wherein  $0.3 \le m \le 1.7$  and R is an alkyl, cycloalkyl or aryl radical having 1-12 carbon atoms, with a titanium compound of the formula  $Ti(OR^{II})_bX_{y-b}$ , in which b is comprised between 0 and 0.5, y is the valence of titanium, X is a halogen and  $R^{II}$  is a C1-C20 hydrocarbon group;
  - (b) reacting the product obtained from (a) with an Al-alkyl compound; and
  - reacting the product obtained from (b) with a titanium compound of the formula Ti(OR<sup>II</sup>)<sub>n</sub>X<sub>y-n</sub>, in which R<sup>II</sup> is a C1-C20 hydrocarbon group, X is a halogen, n is the valence of titanium, and y is a number between 1 and n.
- 12. (Amended) The pre-polymerized catalyst component according to claim 1 in which the solid catalyst component to be pre-polymerized is obtained by:
  - thermally dealcoholating adducts MgCl<sub>2</sub>·pEtOH, where p is a number between 2 to 3.5, until forming adducts in which the alcohol content is reduced to values lower than 2 mols per mol of magnesium dihalide;
  - (b) treating the thermally dealcoholated adduct of step (a) with chemical reagents capable of reacting with the OH groups of the alcohol to dealcoholate the

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- adduct until the alcohol content is reduced to values which are lower than 0.5 mols; and
- reacting the chemically dealcoholated adduct of step (b) with a Ti compound of formula  $Ti(OR^{II})_{n-y}X_y$ , where  $R^{II}$  is a C1-C20 hydrocarbon group, X is a halogen, n is the valence of titanium and y is a number between 1 and n.
- 13. (Amended) The pre-polymerized catalyst component according to claim 1 in which said pre-polymerization is carried out using amounts of an alkyl-Al compound such as to have an Al/Ti molar ratio from 0.001 to 50.
- 14. (Amended) The pre-polymerized catalyst component according to claim 13 in which the Al-alkyl compound is a trialkyl aluminum compound.
- 15. (Amended) The pre-polymerized catalyst component according to claim 14 in which the trialkyl aluminum compound is chosen from triethylaluminum, triisobutylaluminum, tri-n-butylaluminum, tri-n-hexylaluminum, and tri-n-octylaluminum.
- 16. (Amended) A process for the (co)polymerization of ethylene characterized in that it is carried out in the presence of a catalyst comprising (A) a pre-polymerized catalyst component comprising a non-stereospecific solid catalyst component, comprising Ti, Mg and a halogen, which is pre-polymerized with an α-olefin CH<sub>2</sub>=CHR<sup>1</sup> wherein R<sup>1</sup> is a C1-C8 alkyl group, and the amount of the α-olefin pre-polymer is no greater then 100g per g of said solid catalyst component; and (B) an Al-alkyl compound.
- 17. (Amended) The process according to claim 16 in which ethylene is copolymerized with olefins CH<sub>2</sub>=CHR, wherein R is a C1-C12 alkyl group.

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